

## Additional file 6. Sensitivity analysis results

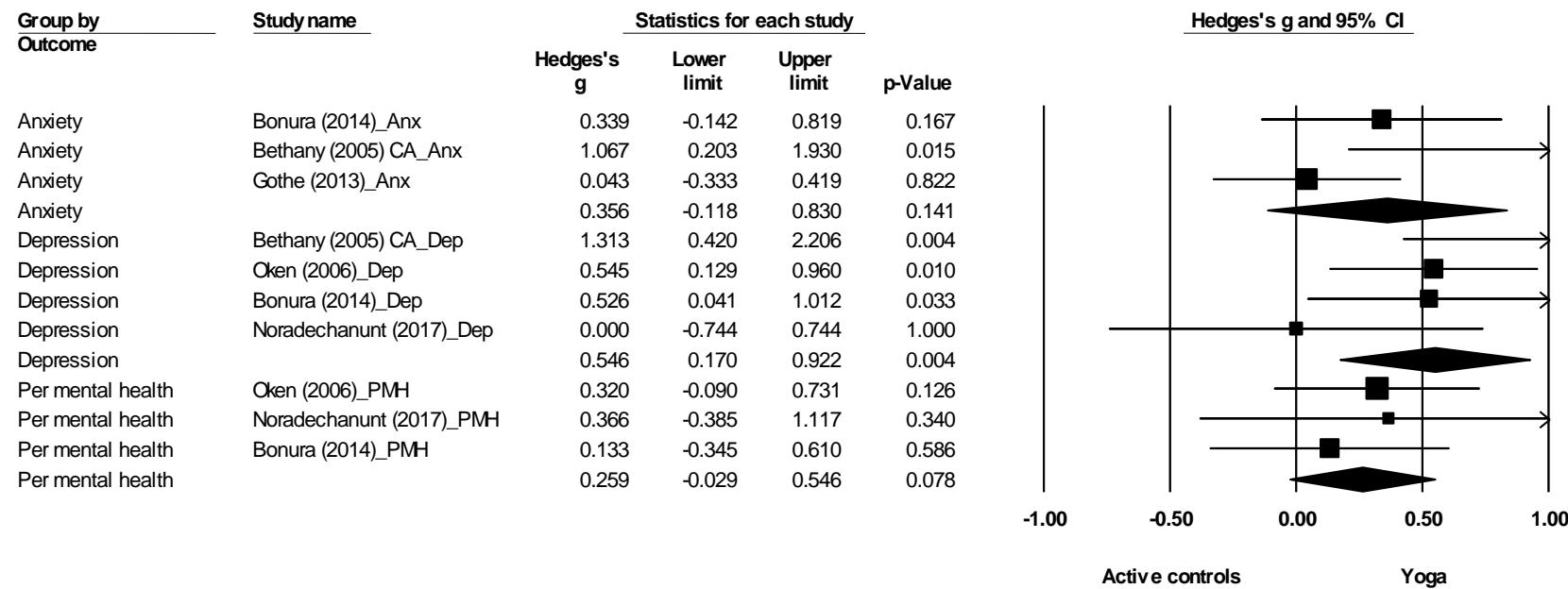
Sensitivity analysis conducted for 1. Bethany (2005) [1], 2. Ni (2014) [2], 3. Manjunath (2005) [3], 4. Krishnamurthy (2007)2 [4]

Four studies [1-4] had one yoga intervention group and two control groups. In these cases, the result was included twice in the meta-analysis with half the number of participants for the yoga group each time. Following this, two sensitivity analyses were also conducted: (i) comparing the full yoga intervention arm and the first control group, and (ii) comparing the full yoga intervention arm and the second control group.

The results for the sensitivity analysis for each study are given below:

### 1. Bethany (2005) [1]

**Sensitivity analysis 1: Meta-analysis results (HRQoL- yoga vs. active controls) choosing yoga group and chair aerobics for Bethany (2005)**

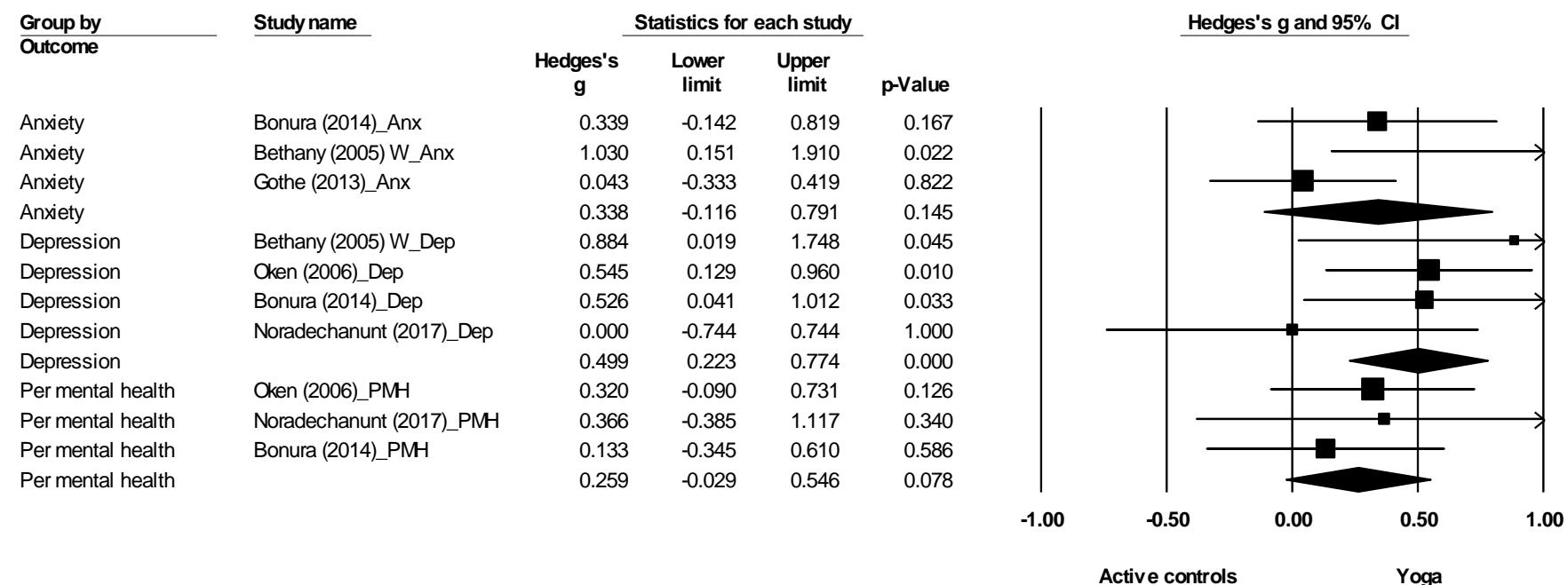


CA: Chair aerobics; Anx: Anxiety; Dep: Depression; Per mental health/PMH: Perceived mental health

### **Heterogeneity data**

<b>Outcome</b>	<b>I square</b>	<b>P value</b>
Anxiety	57.74	0.09
Depression	38.82	0.18
Perceived mental health	0	0.81

**Sensitivity analysis 2: Meta-analysis results (HRQoL- yoga vs. active controls) choosing yoga group and walking programme for Bethany (2005)**



W: Walking programme; Anx: Anxiety; Dep: Depression; Per mental health/PMH: Perceived mental health

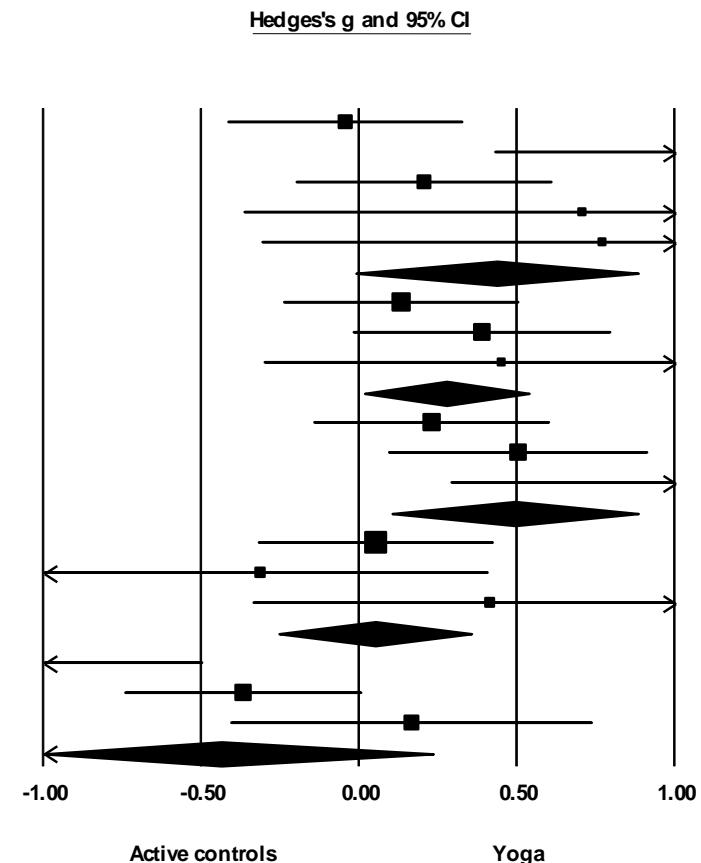
### **Heterogeneity data**

<b>Outcome</b>	<b>I square</b>	<b>P value</b>
Anxiety	53.73	0.15
Depression	0	0.47
Perceived mental health	0	0.81

## 2. Ni (2014) [2]

**Sensitivity analysis 1: Meta-analysis results (Physical function- yoga vs. active controls) choosing yoga group and standard balance training (SBT) for Ni (2014)**

Group by Outcome	Study name	Statistics for each study			
		Hedges's g	Lower limit	Upper limit	p-Value
Balance	Gothe (2016)_Bal	-0.042	-0.418	0.333	0.825
Balance	Ni (2014) SBT_Bal	1.216	0.428	2.004	0.002
Balance	Oken (2006)_Bal	0.207	-0.202	0.616	0.320
Balance	Saravanakumar (2014)_Bal	0.708	-0.367	1.782	0.197
Balance	Morris (2008)_Bal	0.771	-0.310	1.852	0.162
Balance		0.434	-0.013	0.881	0.057
Lower body flexibility	Gothe (2016)_Lflex	0.135	-0.241	0.511	0.482
Lower body flexibility	Oken (2006)_LFlex	0.390	-0.021	0.802	0.063
Lower body flexibility	Noradechanunt (2017)_Lflex	0.452	-0.303	1.206	0.241
Lower body flexibility		0.275	0.014	0.536	0.039
Lower limb strength	Gothe (2016)_LST	0.231	-0.146	0.608	0.229
Lower limb strength	Oken (2006)_LST	0.505	0.091	0.919	0.017
Lower limb strength	Noradechanunt (2017)_LST	1.091	0.289	1.892	0.008
Lower limb strength		0.492	0.102	0.882	0.013
Mobility	Gothe (2016)_Mob	0.054	-0.321	0.430	0.777
Mobility	Ni (2014) SBT_Mob	-0.312	-1.038	0.413	0.399
Mobility	Noradechanunt (2017)_Mob	0.415	-0.338	1.168	0.280
Mobility		0.049	-0.256	0.354	0.754
Walking speed	Ni (2014) SBT_WS	-1.287	-2.082	-0.491	0.002
Walking speed	Gothe (2016)_WS	-0.366	-0.745	0.013	0.058
Walking speed	Oken (2006)_WS	0.167	-0.409	0.744	0.569
Walking speed		-0.439	-1.110	0.232	0.200

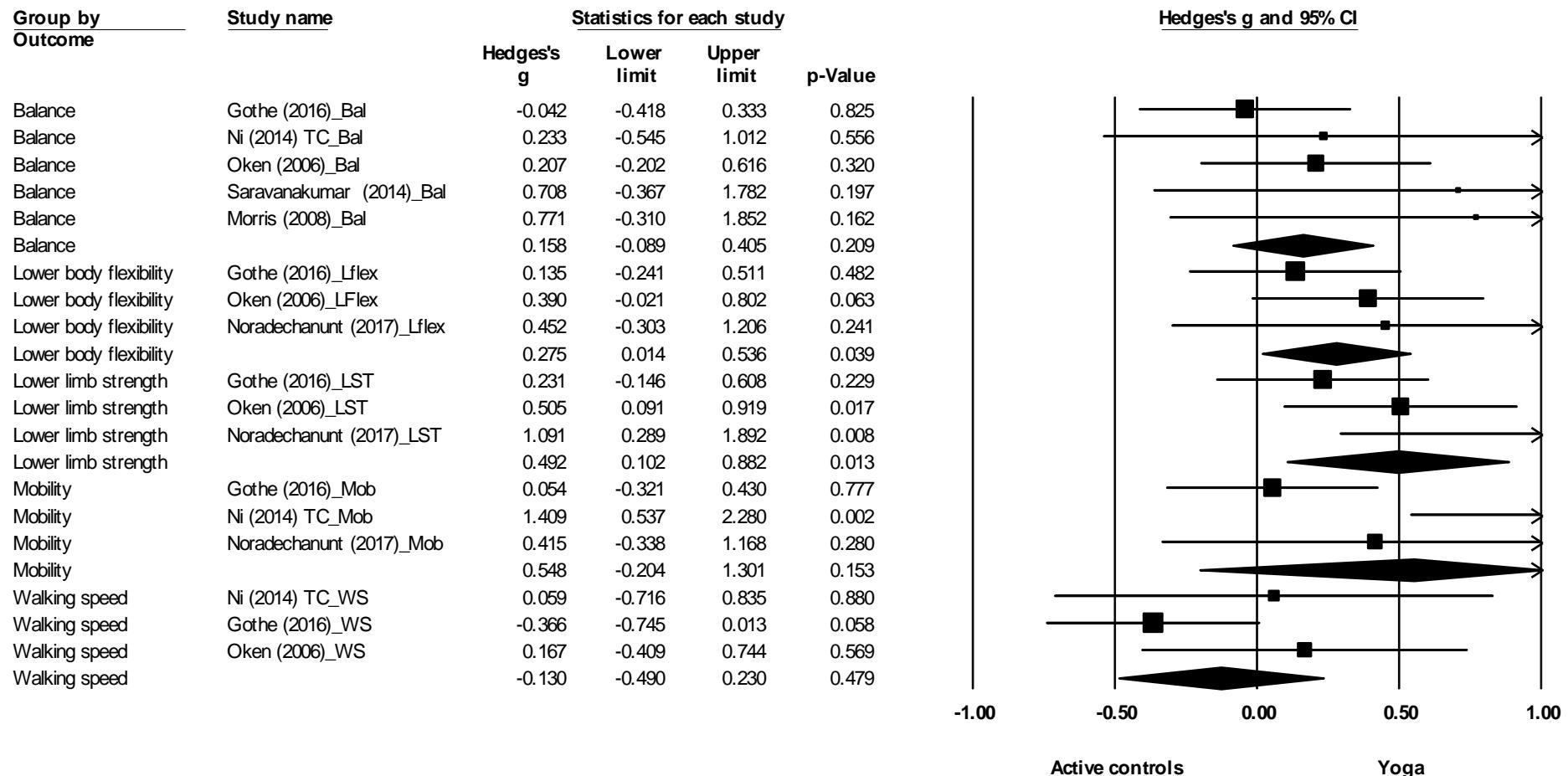


SBT: Standard balance training; Lflex: Lower body flexibility; LST: Lower limb strength; Mob: Mobility; WS: Walking speed

### **Heterogeneity data**

<b>Outcome</b>	<b>I square</b>	<b>P value</b>
Balance	58.89	0.05
Lower body flexibility	0	0.59
Lower limb strength	47.44	0.15
Mobility	0	0.35
Walking speed	76.25	0.02

**Sensitivity analysis 2: Meta-analysis results (Physical function- yoga vs. active controls) choosing yoga group and Tai Chi (TC) group for Ni (2014)**



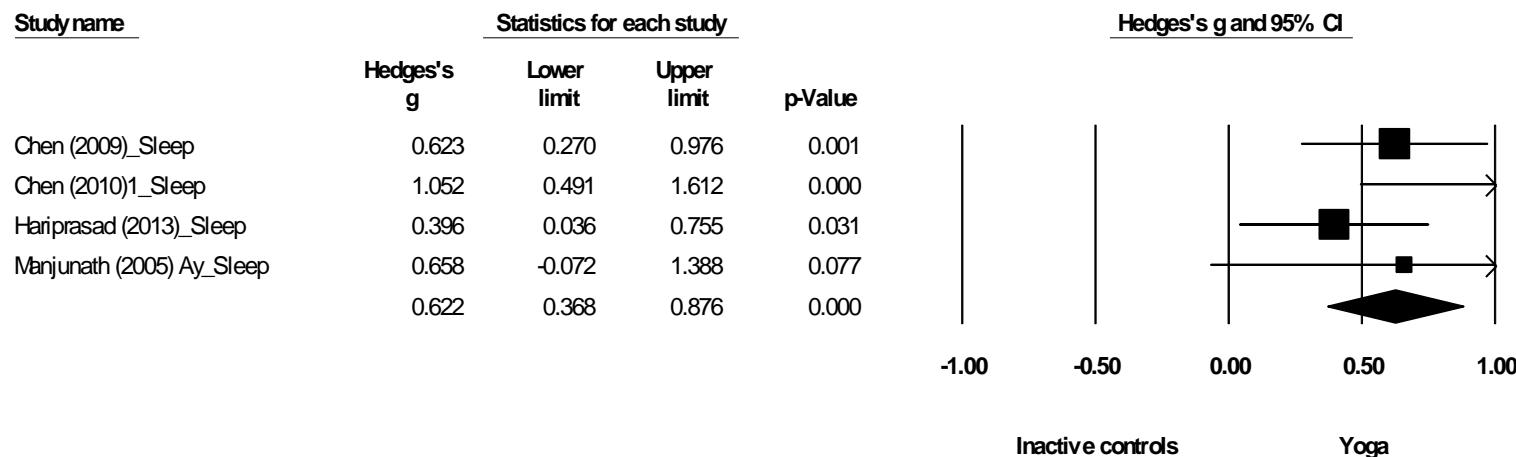
Bal: balance; TC: Tai Chi; Lflex: Lower body flexibility; LST: Lower limb strength; Mob: Mobility; WS: Walking speed

### **Heterogeneity data**

<b>Outcome</b>	<b>I square</b>	<b>P value</b>
Balance	0	0.49
Lower body flexibility	0	0.59
Lower limb strength	47.44	0.15
Mobility	74.83	0.02
Walking speed	25.35	0.26

### 3. Manjunath (2005) [3]

Sensitivity analysis 1: Meta-analysis results (HRQoL outcome, sleep quality- yoga vs inactive controls) choosing yoga group and Ayurveda group (or herbal preparation) for Manjunath (2005)

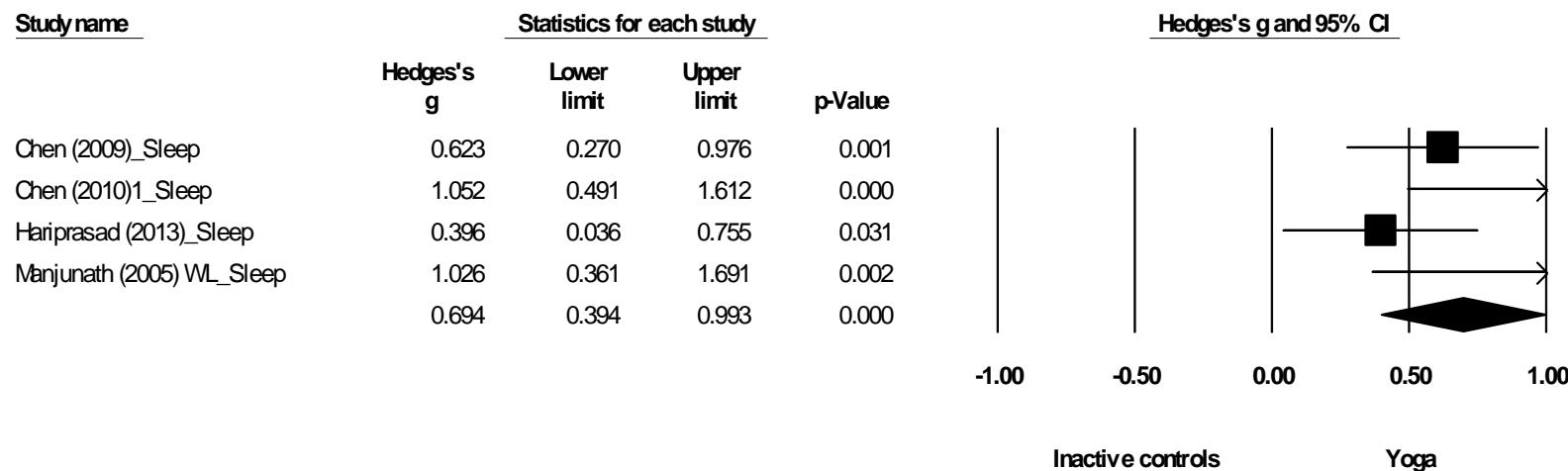


Sleep: Sleep quality; Ay: Ayurveda (herbal preparation)

### Heterogeneity data

Outcome	I square	P value
Sleep	20.41	0.29

**Sensitivity analysis 2: Meta-analysis results (HRQoL outcome, sleep quality- yoga vs inactive controls) choosing yoga group and wait-list group for Manjunath (2005)**



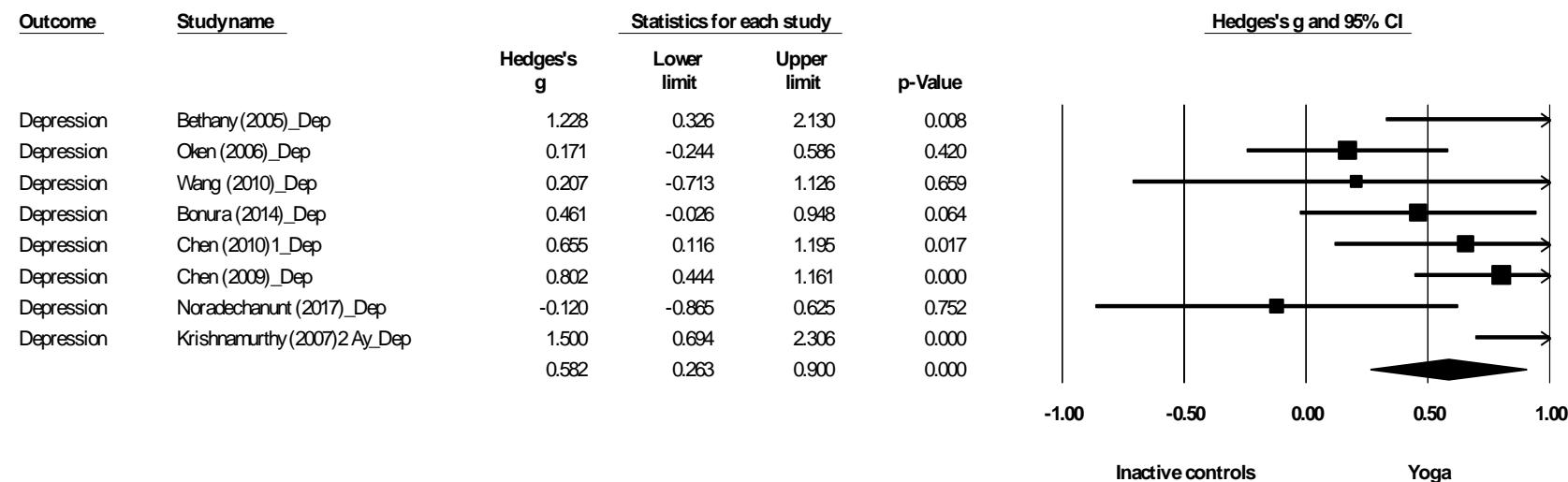
Sleep: Sleep quality; WL: Wait-list control

**Heterogeneity data**

<b>Outcome</b>	<b>I square</b>	<b>P value</b>
Sleep	41.69	0.16

#### 4. Krishnamurthy (2007)2 [4]

Sensitivity analysis 1: Meta-analysis results (HRQoL outcome, depression- yoga vs inactive controls) choosing yoga group and Ayurveda group (or herbal preparation) for Krishnamurthy (2007)2

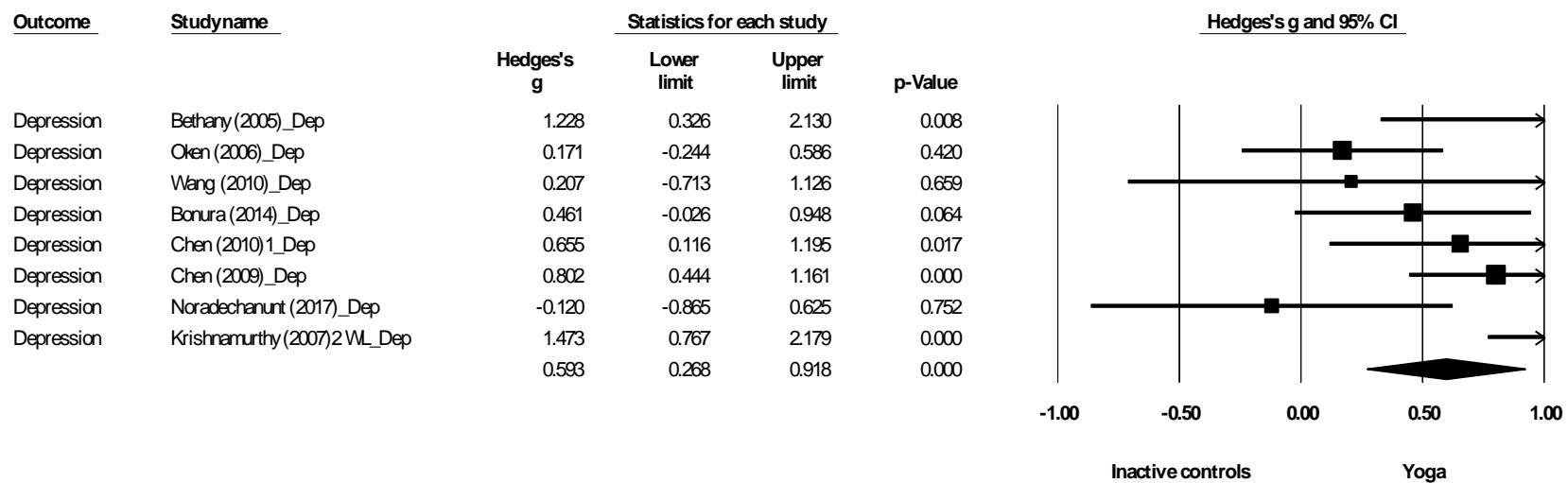


Dep: Depression; Ay: Ayurveda (herbal preparation)

#### Heterogeneity data

Outcome	I square	P value
Depression	57.61	0.02

**Sensitivity analysis 2: Meta-analysis results (HRQoL outcome, depression- yoga vs inactive controls) choosing yoga group and waitlist control group for Krishnamurthy (2007)2**



Dep: Depression; WL: Wait-list control

#### Heterogeneity data

<b>Outcome</b>	<b>I square</b>	<b>P value</b>
Depression	60.38	0.01

## References

1. Bethany KH: **The effects of selected exercise modalities on stress, anxiety, and depression responses in the elderly.** M.S. The Florida State University, 2005.
2. Ni M, Mooney K, Balachandran A, Signorile JF: **Comparative impacts of Tai Chi, balance training, and a specially-designed yoga program on balance in older fallers.** *Archives of Physical Medicine and Rehabilitation* 2014, **95**:1620-1628.
3. Manjunath NK, Telles S: **Influence of Yoga & Ayurveda on self-rated sleep in a geriatric population.** *Indian Journal of Medical Research* 2005, **121**:683-690.
4. Krishnamurthy MN, Telles S: **Assessing depression following two ancient Indian interventions.** *Journal of Gerontological Nursing* 2007, **33**:17-23 17p.